Before The
Federal Communications Commission
Washington, D.C.

In the Matter of	)	
	)	
Revision of the Commission's Rules	)	CC Docket No. 94-102
To Ensure Compatibility With Enhanced	)	WT Docket No. 00-80
911 Emergency Calling Systems	)	

COMMENTS OF THE
CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION

The Cellular Telecommunications Industry Association ("CTIA")[1] respectfully submits these comments in response to the Commission's *Public Notice*[2] seeking additional comment concerning call back capabilities for non-service initialized handsets.[3] The concerns raised by the Public Safety Entities[4] have long been recognized

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1 CTIA is the international organization of the wireless communications industry for both wireless carriers and manufacturers. Membership in the association covers all Commercial Mobile Radio Service ("CMRS") providers and manufacturers. CTIA represents more broadband PCS carriers and more cellular carriers than any other trade association.

2 *Public Notice*, Comment Sought on Request for Further Consideration of Call Back Number Issues Associated with Non-Service Initialized Wireless 911 Calls, DA 00-1098 (Rel. May 18, 2000).

3 A "non-service initialized" handset means that the user is not purchasing service from a wireless carrier. *See* In the Matter of Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, *Memorandum Opinion and Order*, ¶¶ 13, 108, 12 FCC Rcd 22665 (1997)(*First Reconsideration Order*); *see also, Notice of Proposed Rule Making*, at n.46, 9 FCC Rcd. 6170 (1994). When a handset has never been initialized, or the subscription has lapsed, the handset is not associated with a dialable telephone number. *First Reconsideration Order*, at ¶ 108.

4 The "Public Safety Entities" are the Texas 911 Agencies, the National Emergency Number Association (NENA), the Association of Public-Safety Communications Officials-International, Inc. (APCO) and the National Association of State Nine-One-One

by the Commission,[5] and therefore a full record has been developed describing the difficulty of devising a technical solution to this problem. While no technical solutions have been developed since the Commission last received comment on this issue, the marketplace has responded to the Commission's policy choice mandating the forwarding of all wireless 911 calls (in preference to sending PSAPs only validated calls) by developing and marketing handsets specifically designed for dialing 911 that are physically incapable of receiving calls. The widespread availability and use of such handsets means that technical solutions, even if they were available (which they are not), are not sufficient to address the legitimate concerns raised by the Public Safety Entities.[6] Rather than pursue a futile search for technical solutions that are incapable of solving the

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Administrators (NASNA). The Texas 911 Agencies, in turn, are comprised of the Texas Commission of State Emergency Communications (a state agency) and the following local Texas Emergency Communications Districts: Tarrant County 911 District, Bexar Metro 911 Network, Brazos County Emergency Communication District, DENCO Area 911 District, 911 Network of East Texas, Galveston County Emergency Communication District, Greater Harris County 911 Emergency Network, Henderson County 911 Communication District, Howard County 911 Communication District, Kerr Emergency 911 Network, Lubbock County Emergency Communication District, McLennan County Emergency Assistance District, Midland Emergency Communication District, Montgomery County Emergency Communication District, Potter-Randall County Emergency Communication District, and Texas Eastern 911 Network.

[5] The Commission itself recognized that carriers would not always be able to provide reliable call back numbers for 911 calls from non-service initialized phones. *See* In the Matter of Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, *Report and Order and Further Notice of Proposed Rulemaking*, 11 FCC Rcd 18676, 18694-96 ¶ 38 (1996) (*E911 First Report and Order*).

[6] The specific issue raised by the Public Safety Entities is the lack of a valid call back number for "donated wireless telephones … distributed by many organizations." See April 28,2000, Ex Parte Request for Further Consideration of Call Back Number Issues Associated with Non-Service Initialized Wireless 911 Calls, CC Docket No. 94-102, at 2 and the Attachments thereto.

call back problem raised by the Public Safety Entities, CTIA urges the Commission to take the lead in working with the Public Safety Entities and the wireless industry to address this issue through education and training. In this regard, the efforts of CTIA's The Wireless Foundation should serve as the model for other organizations that donate wireless telephones to help victims of crime and domestic violence. The Wireless Foundation's guidelines specifically call for each phone to be activated on a wireless network with a unique telephone number. As a result, there are no technical impediments to calling back a properly commissioned phone used in The Wireless Foundation's "Call to Protect", "ClassLink", and "Communities on Phone Patrol" ("COPP") programs.

I. Technical Solutions to the Call back Problem Remain Illusive

In the *E911 First Report and Order*, the Commission recognized the disadvantages associated with requiring all 911 calls to be processed, and specifically noted concerns that calls from handsets without a code identifier may not provide usable ANI and call back, and that such handsets may facilitate hoax and false alarm calls.[7] Based on the record before it at the time, the Commission acknowledged "that it is not currently possible for carriers to provide reliable call back numbers for all wireless 911 calls" and asked interested parties to address the evaluation and development of these capabilities in their annual status reports.[8]

In response to the Commission's request, the Wireless E 911 Implementation Ad Hoc ("WEIAD") group, consisting of representatives from the wireless industry, the public safety community, and consumer groups, convened a technical workshop to define

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7 *E911 First Report and Order*, at ¶ 38.

8 *First Reconsideration Order*, at ¶¶ 109-110.

the problem and suggest possible courses of action.[9] One year later, in its 1999 Status Report to the Commission, the WEIAD parties reported that with respect to efforts to solve the problems of callback to uninitialized handsets, "[t]he technical impediments that forced the policy choice of forwarding all calls … have not yet been overcome."[10]

Today, the WEIAD parties' conclusion is still an accurate statement. Given the mobility of wireless users, and the use of a radio interface to connect users to carriers' networks, the serving carrier must "validate" each user to establish the service features associated with the caller as well as generate a billing record and prevent fraud. In order to comply with the Commission's rules,[11] wireless carriers' networks either bypass or disregard the call validation process for 911 calls from non-service initialized handsets. The unfortunate result, under existing technologies, is that it is not technically possible to provide call back to a non-service initialized handset.[12]

As the Commission notes, the Ad Hoc Alliance proposed that wireless carriers issue a "Temporary Local Directory Number" ("TLDN") to support 911 call back.[13] As

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[9] See Report of CTIA, PCIA, APCO, NENA, NASNA, ALLIANCE, CC Docket 94-102 (filed Jan. 30, 1998).

[10] Report of CTIA, PCIA, APCO, NENA, NASNA, ALLIANCE, CC Docket 94-102 (filed Feb. 1, 1999), at 7.

[11] Wireless carriers "must transmit all wireless 911 calls without respect to their call validation process." See Section 20.18(b), 47 CFR §20.18(b).

[12] See generally, Ex Parte Presentation of the Wireless E911 Coalition, CC Docket No. 94-102 (filed July 10, 1997); Comments of the Cellular Telecommunications Industry Association, CC Docket 94-102 (filed July 28, 1997); and Additional Comments of Southwestern Bell Mobile Systems, Inc., CC Docket 94-102 (filed July 28, 1997).

[13] *First Reconsideration Order*, ¶ 109.

CTIA stated at the time this issue was first presented, TLDNs are used in a roaming environment, they are used solely for call delivery (and not call back) and are valid for only 20 seconds to facilitate call delivery.[14] More importantly, TLDNs must be translated to a unique subscriber code in order to support call back. In the case of a non-service initialized subscriber, the TLDN would be mapped to the number programmed into the handset by the manufacturer or previous user. If the phone number is within the carrier's line range, given the pressure on numbering resources, there is an excellent chance that the number has been assigned to a new, service initialized, user. Since the new user is registered on the carrier's system, call back will be directed to the new user. If the phone number is not within the carrier's line range, call back would be routed to the carrier associated with the NPA-NXX programmed into the handset. Since that carrier has no record of the user, the call back could not be routed to the serving carrier.[15] Moreover, the implementation of wireless Local Number Portability ("LNP") will further complicate resolution of this issue.[16]

The Commission was well aware of this problem,[17] and adopted rules that provide for the different treatment of 911 calls from non-service initialized phones. Call validation, authentication, and registration are the keys to the Intelligent Network features

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[14] Comments of the Cellular Telecommunications Industry Association, CC Docket 94-102 (filed July 28, 1997), *id.* at 6-7.

[15] Or, as noted in Part II, below, the phone number may be a non-dialable number which cannot be routed to any carrier.

[16] See Comments of the Cellular Telecommunications Industry Association, CC Docket 94-102 (filed July 28, 1997), *id.* at 3-5.

[17] See n. 5, *supra*.

of wireless networks. As the Commission recognized, in order to process all 911 calls, wireless carriers must bypass these functions, and in so doing, users of non-initialized phones also bypass capabilities provided users of service initialized phones. As noted below, education and training promise a better, and more timely, solution to these problems than a redesign of the core architecture of wireless networks.

II. New "911" Handsets Prevent Carriers from Providing Call back

While technical solutions at the network level remain illusive, specialized "911" handsets, designed solely to dial 911 on an uninitialized basis, have become a reality. Highlighting the dynamics of a competitive marketplace, at least one wireless handset manufacturer has responded to the Commission's decision to require carriers to transmit all 911 calls by developing and marketing handsets specifically designed to dial 911, and only 911, without being activated by a carrier. CTIA purchased one such phone, the Magnavox Mobile911, after seeing it advertised in The New York Times.[18] Since this phone is not designed to be activated, it is not marketed through carriers' distribution channels. Instead, it is marketed through mass media advertisements,[19] the Internet,[20] and affiliate sales channels.[21] These distributors claim that the Magnavox Mobile911 has

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[18] See *"Why pay for cellular phone service if you need it only for emergencies?"*, The New York Times Magazine, March 12, 2000, p. 70, attached as Exhibit 1.

[19] *Id.*

[20] An Internet search for "Magnavox Mobile911" identified hundreds of web sites selling the phone. See Google Search, attached as Exhibit 2 (first 100 results).

[21] See generally, Exhibit 2 at p. 3.

been featured on "The Oprah Winfrey Show", "The Today Show", CNN, NPR's "All Things Considered", and "The New York Times."[22]

CTIA submitted the Magnavox Mobile911 handset to Intertek Testing Services, an FCC designated Telecommunication Certification Body ("TCB").[23] Intertek Testing Services found that the Magnavox Mobile911 "does not have a standby state and cannot be paged when powered down. … When the 911 button is pushed the mobile turns on, finds a base station and originates a call. The number called by the mobile is 911. When the call is terminated by either the base station or the mobile, the mobile returns to its off state and cannot be paged."[24] Indeed, one distributor highlights the fact that this phone cannot receive calls by stating: "Mobile911 is ideal for students, because it doesn't disrupt classes with incoming calls."[25]

The Intertek Testing Services report also found that the phone number (*i.e.*, the Mobile Identifying Number) associated with the tested phone was a non-dialable number: 123-456-7890, and that the Magnavox Mobile911 phone will not register with a carrier's system or accept a page.[26]

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22 See <<www.mobile911.com>>, attached as Exhibit 3.

23 *Public Notice*, Office of Engineering and Technology and Common Carrier Bureau Announce the Designation of Telecommunication Certification Bodies (TCBs) to Approve Radiofrequency and Telephone Terminal Equipment, DA 00-1223 (rel. June 2, 2000). To be designated by the FCC, a TCB must be accredited by the American National Standards Institute.

24 Letter Report, Intertek Testing Services, Project: CTIA - 00-25 (June 15, 2000), attached as Exhibit 4.

25 See Exhibit 1; see also, <<www.comtrad.com>>, attached as Exhibit 5.

26 Exhibit 4, *id.*

The widespread availability and use of handsets that are programmed with non-dialable numbers, that will not register with a carrier's system, and that are physically incapable of receiving a call, prove conclusively that technical solutions, even if they were available (which they are not) are not sufficient to address the legitimate concerns raised by the Public Safety Entities.

III. Education and Training Is the Key to Solving the Call Back Problem

Rather than pursue a futile search for technical solutions that are incapable of solving the call back problem raised by the Public Safety Entities, CTIA urges the Commission to take the lead in working with the Public Safety Entities and the wireless industry to address this issue through education and training. CTIA respectfully submits that the Commission has a duty to advise the public of the safety benefits associated with the use of service-activated handsets to call 911.

The specific issue raised by the Public Safety Entities is the lack of a valid call back number for "donated wireless telephones … distributed by many organizations."[27] On April 6, 2000, the National Emergency Number Association ("NENA") sent a letter to the National Coalition Against Domestic Violence ("NCADV") that foreshadowed the Public Safety Entities' April 28, 2000, Ex Parte Request.[28] NENA's letter informs the NCADV of certain limits on the technical capabilities of the wireless phones used in the "Call to Protect" program, and offers NENA's assistance in reviewing the instructions provided users of these phones, as well as NENA's assistance in answering any questions

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[27] See n. 6, *supra*.

[28] NENA's April 6, 2000, letter is attached as Exhibit 6.

regarding 911 services.[29] NENA is to be applauded for its commitment to such education and training efforts.

In this regard, the efforts of CTIA's The Wireless Foundation can serve as the model for other organizations that donate wireless telephones to help victims of crime and domestic violence. The Wireless Foundation, with the generous support of the wireless industry, has provided more than 32,000 handsets through the Foundation's "Call to Protect", "ClassLink", and "Communities on Phone Patrol" ("COPP") programs. Each of the sixty-three wireless carriers participating in these programs has received a detailed description of The Wireless Foundation's guidelines. These guidelines specifically call for each phone to be activated on a wireless network with a unique telephone number.[30] As a result, there are no technical impediments to calling back a properly commissioned phone used in the "Call to Protect" and "Communities on Phone Patrol" ("COPP") programs sponsored by The Wireless Foundation.

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[29] See Exhibit 6. On May 5, 2000, The Wireless Foundation responded to NENA's letter. A copy of the Foundation's letter is attached as Exhibit 7.

[30] The Wireless Foundation's Guidelines for both the "Call to Protect" and the "COPP" programs instruct carriers to set up a subscriber account for each donated phone, and to program the phones for both 911 and one non-emergency number. Phones used in the "ClassLink" program are specifically intended to provide both inbound and outbound calls and are programmed like other service initialized phones.

Conclusion

CTIA shares the concerns raised by the Public Safety Entities. Rather than pursue a futile search for technical solutions that are incapable of solving the call back problem, CTIA urges the Commission to take the lead in working with the Public Safety Entities and the wireless industry to address this issue through education and training.

Respectfully submitted,

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